REMARKS

Applicant has amended the specification to describe what is clearly shown, so no new matter has been added. Enclosed are copies of Figs. 1 and 2 with changes shown in red ink. Also enclosed are ink drawings that contain the changes. The changes show a "prime" added to M in Fig. 1 to avoid the double use of M and the addition of an arrow marked F in Fig. 2, neither of which adds new matter.

Applicant has canceled claims 1-15 and added new claims 16-24 that are based on the cancelled claims. Accordingly, only claims 16-24 remain in the application. All previous claims were rejected on Shotbolt (4,793,737).

New claim 16 is some what similar to now-canceled claim 1. Claim 16 describes an offshore fluid transfer system that includes a conduit structure that includes a supported pipe (e.g. 70 in applicant's Fig. 2) that extends along a plurality of meters of the height of a single rigid sea floor riser support (50) and that is fixed to the riser support at a plurality of locations that are vertically spaced apart by a plurality of meters. The flexible conduit portion (46) extends from the riser support to the floating structure.

Only figure 5 of Shotbolt shows a rigid sea floor riser support 35. However, the only portions of his flexible riser pipes 10 that are fixed to his nonbuoyant cradles 23 are the parts that actually lie on his cradles. The lower portions of his flexible pipes 10 that extend down from his cradles 23 to his base 4 are not fixed to his rigid support, and the portions of his flexible pipes 10 that lie on his base 4 are not described or shown to be fixed to his base. His Fig. 4, which shows a buoy supporting his flexible pipe, shows his lower pipe portions not even lying on his base 4. Accordingly, applicant believes that new claim 16 is not anticipated by Shotbolt, and therefore should be allowed.

New claim 17, which depends from claim 16, describes a curved rigid pipe section (e.g. 80 in applicant's Fig. 2) which is curved by more than 45° between its ends, and which lies at a top of the riser support. The first end of the curved pipe is connected to the upper end of the supported pipe (70) and the second end

is connected to the end of the flexible conduit portion (46). Applicant does not require a large radius curved surface around which to bend a pipe or hose, but instead uses a rigid curved pipe section. In Shotbolt's Fig. 5, he uses a long flexible hose that extends in a double catenary curve and around his guide cradles 23 and then extends to his base 1, without showing a curved rigid pipe section to extend around his guide cradles 23.

New claim 18, which depends from claim 16, describes the supported pipe (70 in applicant's Fig. 2) as being straight and rigid. In Shotbolt's Fig. 5, the pipe sections extending between his cradles 23 and his base 4 are curved and are not rigid.

New claim 19, which depends from claim 16, describes a construction such as shown in applicant's Fig. 2, where the supported pipe (70) extends at a forward F and upward incline to the top portion (54) of the riser support, and the flexible conduit portion (46) extends at a forward-downward incline from the top portion of the riser support. In Shotbolt's Fig. 5, the portion of his flexible pipe 10 that extends in a double catenary curve from his guide cradles 23, extends at a forward-downward incline, but the portion of his flexible pipe that extends up from his base 4 to his cradles 23 extends at a rearward-upward incline instead of forward-upward incline. It appears that Shotbolt wants to create a greater wrap of his flexible pipe around his cradles 23 rather than minimize the angle of curvature at the top of his riser support.

Claim 20, which depends from claim 16, describes a system such as shown, for example, in applicant's Fig. 6, where the support upper portion forms a convexly rounded hose-supporting top surface (124) and the conduit flexible portion extends around the top surface. The top surface (124) has a radius of curvature of plurality of meters. Such a large radius of curvature allows a flexible hose to repeatedly bend and reverse directions (as it lifts off and lays down) while maintaining a long hose life. Applicant notes that in his specification at page 10, line 20, he describes the radius of curvature J as being 4.7 meters. In Shotbolt, he describes his beam 3 of his Fig. 4 as having a diameter of 1 to 2 meters (his

column 6, lines 4-5) which results in a radius of curvature of only 0.5 to 1 meter. Shotbolt does not mention anywhere that his flexible pipe 10 can lift off and lay back down on his curved beam.

New claim 21, which depends from claim 16, describes a construction such as shown in applicant's Fig. 3, where the system includes a plurality of rigid pipe lengths (70A-70F) which are laterally spaced apart and each extends along a plurality of meters of the height of the riser support. In Shotbolt, he has a plurality of flexible pipes rather than rigid pipe lengths.

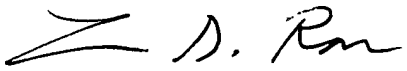
New claim22, describes a construction such as shown in applicant's Fig.2, where a conduit has a rigid lower portion (70) of a length of a plurality of meters that is fixed to the rigid frame and that extends along the frame, along a height of a plurality of meters. In Shotbolt's Fig. 5, his conduit 10 is flexible and has flexible lower portions rather than rigid lower portions. Also, his flexible lower portions that extends down from his guide cradles 23 are fixed only to his cradles 23, and appear to lie loosely on his base 4. He shows nothing to fix his flexible pipes to his base and his similar Fig. 4 shows his flexible pipes lying on the seafloor rather than lying on his base.

New claim 23, which depends from claim 22, describes the conduit as including a rigid pipe (e.g. 80 in applicant's Fig. 2) that extends in a curve of at least 45° and that is connected to the upper end of a conduit rigid lower portion and also connected to the flexible conduit member. Shotbolt does not show a rigid curved pipe, but instead relies on his flexible pipe 10 to extend in a curve around one of his guide cradles 23.

New claim 24, describes a construction such as shown in applicant's Fig.2, where the conduit lower portion extends at a forward F and upward incline to the top portion of the riser support, and with the flexible conduit portion extending at a forward-downward incline therefrom. In Shotbolt, his Fig. 5 shows that the portion of his flexible pipe that extends from his guide cradles 23 towards his vessel 2 extends at a downward-forward incline, but the lower portion of his flexible pipes extends at rearward-upward inclines.

In view of the above, favorable reconsideration of the application is courteously requested. If the Examiner should wish to discuss the application, he is invited to call Leon D. Rosen at (310) 477-0578.

Respectfully submitted,



Leon D. Rosen
Attorney for Applicant
Registration No. 21,077

10960 Wilshire Boulevard
Suite 1220
Los Angeles, CA 90024
(310) 477-0578